#### Avian influenza (Chapter 2.1.15)

During the 71<sup>st</sup> General Session in May 2003, a revised chapter was discussed by the OIE International Committee. As a result of concerns expressed by several Delegates regarding implementation of the recommendations as written, the chapter was not adopted.

The Code Commission considered in depth the comments received shortly before the 71<sup>st</sup> General Session from Argentina, Australia, the EU, Japan and the USA, the outcome of the discussion held during the General Session, as well as further written comments. To address comments received, the Code Commission referred the following issues to an *ad hoc* Group:

- the zoonotic aspects of avian influenza;
- the influence of different disease control strategies including vaccination;
- surveillance for avian influenza;
- the role of non-poultry species;
- the risks presented by different commodities from countries of different disease status; and
- the incubation period for avian influenza.

The *ad hoc* Group discussed the definition of AI and the associated reporting obligations of Member Countries, and revised the definition. The *ad hoc* Group recognised that fresh meat and table eggs probably present a much lower likelihood of transmitting low pathogenic notifiable avian influenza (LPNAI) than highly pathogenic notifiable avian influenza (HPNAI) viruses, but, due to incomplete scientific data, the recommendations proposed for these commodities only partly reflected this difference. The *ad hoc* Group addressed this difference as well through a proposed new definition for 'NAI-free establishment' which distinguishes between the two regarding permitted distances from establishments infected with LPNAI or HPNAI.

The Code Commission reviewed the report of the November 2003 meeting of the *ad hoc* Group (Section C of <u>Appendix XXVI</u>) and made further changes to its proposals with a view to accomplishing adoption once the following matters have been addressed:

- categories of notifiable avian influenza (NAI) status free from NAI (i.e. both LPNAI and HPNAI), free from HPNAI (LPNAI probably present) and of unknown NAI status;
- encouragement of surveillance and notification of both LPNAI and HPNAI to maximise
  transparency and minimise unjustified trade restrictions as a result of the reporting of the
  presence of LPNAI; in this regard the Code Commission encouraged Member Countries to
  conduct further research on LPNAI virus to clarify its relationship with HPNAI virus and the
  risk it poses, if any, in international trade in specific poultry commodities;
- the Code Commission's revision of the measures proposed by the ad hoc Group to better differentiate the risks associated with the different commodities traded; for each group of commodities, articles were drafted to address the different risk levels posed by the NAI status of the country/zone/compartment of origin;
- the revised chapter's taking into account the proposed revised definitions for zone and compartment, and the Code Commission's view that the correct use of these concepts is essential for the proper application of this chapter.

The revised chapter (<u>Appendix XXIV</u>) is submitted for Member Country comment by 18 June 2004, to enable consideration by the Bureau of the Code Commission.

Prior to this, progress in this chapter (and the chapter on Newcastle disease) is dependent on a productive discussion at the General Session on the concepts underlying the general approach.

#### CHAPTER 2.1.14.

#### AVIAN INFLUENZA

Article 2.1.14.1.

For the purposes of this *Code*, avian influenza (AI) is defined as 'an infection of poultry caused either by any influenza A virus which has an IVPI in 6 week old chickens greater than 1.2 or by an influenza A virus of H5 or H7 subtype'.

For the purposes of this *Terrestrial Code*, notifiable avian influenza (NAI) is defined as an infection of poultry caused by any influenza A virus of the H5 or H7 subtypes or by any AI virus with an intravenous pathogenicity index (IVPI) greater than 1.2 (or as an alternative at least 75% mortality) as described below. NAI viruses can be divided into highly pathogenic notifiable avian influenza (HPNAI) and low pathogenicity notifiable avian influenza (LPNAI):

1) HPNAI viruses have an IVPI in 6-week-old chickens greater than 1.2 or, as an alternative, cause at least 75% mortality in 8 4-to 8-week-old chickens infected intravenously. H5 and H7 viruses which do not have an IVPI of greater than 1.2 or cause less than 75% mortality in an intravenous lethality test should be sequenced to determine whether multiple basic amino acids are present at the cleavage site of the haemagglutinin molecule (HA0); if the amino acid motif is similar to that observed for other HPNAI isolates, the isolate being tested should be considered as HPNAI.

## LPNAI are all influenza A viruses of H5 and H7 subtype that are not HPNAI viruses.

Poultry is defined as 'all birds reared or kept in captivity for the production of meat or eggs for consumption, for the production of other commercial products, for restocking supplies of game, or for breeding these categories of birds'.

For the purpose of *international trade*, this chapter deals not only with the occurrence of clinical signs caused by NAI virus, but also with the presence of infection with NAI virus in the absence of clinical signs. <a href="Articles-dealing with trade in commodities recommend different sanitary measures, depending on the presence or absence of clinical signs.">Articles dealing with trade in commodities recommend different sanitary measures, depending on the presence or absence of clinical signs.</a>

The following defines the occurrence of AI virus infection:

- 1) AI virus has been isolated and identified as such from poultry or a product derived from poultry, or
- 2) viral antigen or viral RNA specific to H5 or H7 subtype of AI virus has been identified in samples from poultry or a product derived from poultry, or
- 3) antibodies to H5 or H7 subtype of AI virus that are not a consequence of vaccination have been detected in poultry.

The following defines the occurrence of NAI virus infection:

- 1) HPNAI virus has been isolated and identified as such or specific viral RNA has been detected in poultry or a product derived from poultry, or
- 2) LPNAI virus has been isolated and identified as such or specific viral RNA has been detected in poultry or a product derived from poultry, or
- antibodies to H5 or H7 subtype of NAI virus that are not a consequence of vaccination, nor indicative of a non-specific reaction, have been detected in poultry; in such cases, virus isolation should be attempted to establish whether the serological positivity is due to LPNAI or HPNAI. If appropriate samples are not available or if results are negative, a thorough epidemiological investigation including further sampling and testing should be carried out to identify the type or exclude the presence of NAI infection.

For the purposes of this *Terrestrial Code*, 'NAI-free establishment' means an *establishment* <u>in which</u> there has been no clinical sign of NAI for the past 21 days, and which is not situated within 3 km of an *establishment* infected with HPNAI and within one km of an *establishment* infected with LPNAI.

For the purposes of this *Terrestrial Code*, the *incubation period* for NAI shall be 28 21 days.

Standards for diagnostic tests are described in the *Manual*.

Any vaccine used should comply with the standards described in the *Terrestrial Manual*.

Article 2.1.14.1bis.

The NAI status of a country or compartment can be determined on the basis of the following criteria:

- <u>1)</u> the outcome of a risk assessment identifying all potential factors for NAI occurrence and their historic perspective;
- 2) NAI is notifiable in the whole country, an on-going NAI awareness programme is in place, and all notified suspect occurrences of NAI are subjected to field and, where applicable, laboratory investigations;
- <u>appropriate surveillance is in place to demonstrate the presence of infection in the absence of clinical signs in poultry, and the risk posed by birds other than poultry; this may be achieved through an NAI surveillance programme in accordance with this chapter and Chapter 1.3.6.</u>

Article 2.1.14.2.

### NAI free country or **zone/**compartment

A country or <u>zone/</u>compartment may be considered free from NAI when it has been shown that NAI infection has not been present for the past 12 months. If <u>a stamping out policy is applied</u> infected poultry are slaughtered, this period shall be <u>6 3</u> months after the slaughter of the last infected poultry and *disinfection* of all affected *establishments*.

The NAI status should be determined by an ongoing surveillance and monitoring programme (carried out in conformity with the provisions of Chapter 1.3.6.) based on virus isolation, virus detection or serology. The programme may need to be adapted to target parts of the country or zone/compartment at a higher risk due to historical or geographical factors, population data, or proximity to recent outbreaks.

Freedom of infection in a country or zone can be demonstrated with <a href="random and/or targeted\_serological surveillance">random and/or targeted\_serological surveillance at a minimum interval of 6 months</a> designed to provide at least a 95% level of confidence of detecting a prevalence of NAI infected enterprises of 1%. Freedom of infection in an enterprise compartment can be demonstrated with an ongoing surveillance programme designed to provide at least a 95% level of confidence of detecting a prevalence of NAI infection of 10%. Each establishment should be sampled to provide a 95% level of confidence of detecting a prevalence of NAI of 20 25%. For commercial ducks the surveillance programme should be based on virus isolation or detection in the absence of validated serological methods.

In the case of a country or zone in which vaccination is being conducted, the ongoing surveillance and monitoring programme (carried out in conformity with the provisions of Chapter 1.3.6.) based on virus isolation, virus detection or serology should be carried out on all vaccinated flocks at a minimum interval of 6 months. In each vaccinated flock, the number of birds to be tested should provide at least a 95% level of confidence of detecting a prevalence of NAI infection of 20-25/29%. In the case of a compartment enterprise in which vaccination is being conducted, the ongoing surveillance and monitoring programme (carried out in conformity with the provisions of Chapter 1.3.6.) based on virus isolation, virus detection or serology should be carried out to provide at least a 95% level of confidence of detecting a prevalence of NAI infection of 10%. If a serological test is used, it should be able to distinguish vaccinated birds from infected birds. Additional security should be provided by the use of relevant serological tests in identifiable sentinel birds which can be clinically inspected or tested to help identify field infections in vaccinated flocks.

Article 2.1.14.3.

When importing from an NAI free country or **zone/**compartment, *Veterinary Administrations* should require:

for live poultry (other than day-old poultry)

the presentation of an *international veterinary certificate* attesting that the poultry:

- 1) showed no clinical sign of NAI on the day of shipment;
- 2) were kept in an NAI free country or <u>zone/</u>compartment since they were hatched or for the past <u>28 21</u> days;
- <u>against NAI, or have been vaccinated and the date of vaccination and the details of the vaccine are stated.</u>

[Note: If the poultry were vaccinated against NAI, the nature of the vaccine used and the date of vaccination should be stated in the certificate.]

Article 2.1.14.4.

Regardless of the NAI status of the country of origin, *Veterinary Administrations* should require:

for the importation of live birds other than poultry

the presentation of an *international veterinary certificate* attesting that the birds:

1) showed no clinical sign of NAI on the day of shipment;

- 2) were kept in <u>isolation approved by the *Veterinary Services*</u> a *quarantine station* since they were hatched or for the <u>28 21</u> days prior to shipment and showed no clinical sign of NAI during the <u>isolation quarantine</u> period;
- 3) were subjected to a diagnostic test 7 to 14 days prior to shipment to demonstrate freedom from NAI.

Article 2.1.14.5.

When importing from an NAI free country or **zone/**compartment, *Veterinary Administrations* should require:

for day-old live poultry

the presentation of an *international veterinary certificate* attesting that the poultry:

- 1) showed no clinical sign of NAI on the day of shipment;
- 2) were kept in an NAI free country or **zone/**compartment since they were hatched;
- 3) were derived from parent flocks which had been kept in an NAI free country or zone/compartment for 21 days prior to the collection of the eggs:
- <u>and/or the parent flock had/had not been vaccinated and, if vaccinated, the date of vaccination and the details of the vaccine are stated.</u>

Note: If the day old poultry or the parents of the poultry were vaccinated against NAI, the details of the vaccine and the date of vaccination should be provided.

<u> Article 2.1.14.5bis.</u>

When importing from an NAI free country or zone/compartment, *Veterinary Administrations* should require:

for hatching eggs

the presentation of an *international veterinary certificate* attesting that the eggs:

- 1) came from an NAI free country or zone/compartment;
- <u>were derived from parent flocks which had been kept in an NAI free country or zone/compartment for 21 days prior the collection of the eggs;</u>
- <u>were derived from parent flocks which had not been vaccinated against NAI, or which had been vaccinated against NAI and the date of vaccination and the details of the vaccine are stated.</u>

Article 2.1.14.6.

When importing from an NAI free country or **zone/**compartment, *Veterinary Administrations* should require:

for hatching eggs or eggs for consumption

the presentation of an *international veterinary certificate* attesting that the eggs come from an NAI free country or **zone/**compartment.

#### Article 2.1.14.6bis.

When importing from a country or zone/compartment free from HPNAI infection, *Veterinary Administrations* should require:

# for eggs for consumption

the presentation of an *international veterinary certificate* attesting that the eggs:

- 1) come from a country or zone/compartment free from HPNAI infection, and
- 2) are transported in new disposable packing material.

#### Article 2.1.14.6ter.

When importing from a country or zone/compartment not known to be free from HPNAI, *Veterinary Administrations* should require:

# for eggs for consumption

the presentation of an *international veterinary certificate* attesting that the entire consignment of eggs comes from birds:

- 1) which have been kept in an NAI free establishment;
- <u>which have been tested serologically or by virus detection to give a 95% probability of detecting a 5% prevalence of NAI infection, every 21 days, with negative results.</u>

Article 2.1.14.7.

When importing from an NAI free country or compartment, *Veterinary Administrations* should require:

#### for egg products

the presentation of an *international veterinary certificate* attesting that the egg products come from, and were processed in, an NAI free country or **zone/**compartment.

# <u> Article 2.1.14.7bis.</u>

When importing from a country or zone/compartment free from HPNAI infection, *Veterinary Administrations* should require:

## for egg products

the presentation of an *international veterinary certificate* attesting that the egg products come from, and were processed in a country or zone/compartment free from HPNAI infection.

### Article 2.1.14.7ter.

When importing from a country or zone/compartment not known to be free from HPNAI, Veterinary Administrations should require:

# for egg products

## the presentation of an *international veterinary certificate* attesting that the egg products:

- 1) are derived from eggs for consumption which meet the requirements of Articles 2.1.14.6., 2.1.14.6bis. or 2.1.14.6ter.; or
- <u>were processed to ensure the destruction of the NAI virus, and the necessary precautions were taken after processing to avoid contact of the commodity with any source of NAI virus.</u>

Article 2.1.14.8.

When importing from an NAI free country or **zone/**compartment, *Veterinary Administrations* should require:

# for poultry semen

the presentation of an *international veterinary certificate* attesting that the donor birds:

- 1) showed no clinical sign of NAI on the day of semen collection;
- 2) were kept in an NAI free country or compartment for the 28 21 days prior to semen collection.

Article 2.1.14.9.

Regardless of the NAI status of the country of origin, *Veterinary Administrations* should require:

# for the importation of semen of birds other than poultry

the presentation of an *international veterinary certificate* attesting that the donor birds:

- 1) were kept in <u>isolation</u> approved by the <u>Veterinary Services</u> quarantine for the <u>28 21</u> days prior to semen collection:
- 2) showed no clinical sign of NAI during the <u>isolation</u> <del>quarantine</del> period;
- 3) were tested between 7 and 14 days prior to semen collection and shown to be free of NAI.

Article 2.1.14.10.

When importing from NAI free country or **zone/**compartment, *Veterinary Administrations* should require:

# for fresh meat and meat products of poultry, and poultry viscera

the presentation of an *international veterinary certificate* attesting that the entire consignment of meat comes from birds:

- 1) which have been kept in an NAI free country or <u>zone/</u>compartment since they were hatched or for the past <u>28 21</u> days;
- 2) which have been slaughtered in an *approved abattoir* and have been subjected to ante-mortem and post-mortem inspections for NAI with favourable results.

### Article 2.1.14.10bis.

When importing from a country or zone/compartment free from HPNAI infection, Veterinary Administrations should require:

for fresh meat and meat products of poultry (other than turkey)

the presentation of an *international veterinary certificate* attesting that the entire consignment of meat or meat product comes from birds:

- <u>which have been kept in an establishment since they were hatched or for the past 21 days in which there has been no clinical sign of NAI in the past 21 days;</u>
- <u>which have been slaughtered in an approved abattoir and have been subjected to ante-mortem and post-mortem inspections for NAI with favourable results.</u>

### Article 2.1.14.10ter.

When importing from a country or zone/compartment not known to be free from HPNAI, Veterinary Administrations should require:

for fresh meat and meat products of poultry and poultry viscera (other than turkey)

the presentation of an *international veterinary certificate* attesting that the entire consignment of meat comes from birds:

- 1) which have been kept in a *free establishment*;
- 2) which have been tested to give a 95% probability of detecting a 5% prevalence of NAI infection not more than 7 days prior to slaughter using virus detection or virus isolation tests, and serological tests, with negative results in all cases;
- <u>which have been slaughtered in an approved abattoir which has not processed poultry infected with NAI since last cleaned and disinfected, and have been subjected to ante-mortem and post-mortem inspections for NAI with favourable results.</u>

Article 2.1.14.11.

When importing from NAI free country or compartment, Veterinary Administrations should require:

for poultry viscera

the presentation of an *international veterinary certificate* attesting that the entire consignment of meat comes from birds:

- 1) which have been kept in an NAI free country or compartment since they were hatched or for the past 28 days;
- 2) which have been slaughtered in an *approved abattoir* and have been subjected to ante-mortem and post-mortem inspections for NAI with favourable results.

Article 2.1.14.12.

When importing from a country or <u>zone/</u>compartment not known to be <del>considered</del> free from NAI, *Veterinary Administrations* should require:

for fresh meat and viscera of poultry turkey

the presentation of an *international veterinary certificate* attesting that the entire consignment of meat comes from birds:

- 1) which have been kept in a <u>free</u> establishment <u>for at least 28 days</u> and regularly inspected by the <u>official veterinarian</u>;
- 2) which have been tested to give a 95% probability of detecting a 5% prevalence of NAI infection not more than 7 days prior to slaughter using virus detection or virus isolation tests, and serological tests, with negative results in all cases;
- 3) which have been slaughtered in an approved abattoir which has not processed poultry infected with NAI since last cleaned and disinfected, and have been subjected to ante-mortem and postmortem inspections for NAI with favourable results.

### Article 2.1.14.12 bis

When importing from a country or compartment free from clinical signs of NAI but not considered free from NAI infection, Veterinary Administrations should require:

## for fresh meat of poultry

the presentation of an *international veterinary certificate* attesting that the entire consignment of meat comes from birds:

- <u>which have been kept in an country or compartment free from clinical signs of NAI but not considered free from NAI infection since they were hatched or for the past 28 days:</u>
- 2) which have been slaughtered in an approved abattoir and have been subjected to ante-mortem and post-mortem inspections for NAI with favourable results.

```
Article 2.1.14.13.
```

When importing from country or <u>zone/</u>compartment not <u>known to be</u> <del>considered</del> free from NAI, *Veterinary Administrations* should require:

for processed meat products and processed viscera and egg products of poultry

the presentation of an *international veterinary certificate* attesting that:

- <u>1)</u> the commodity is derived from *fresh meat*, *meat products* and/or viscera which meet the requirements of Articles 2.1.14.10., 2.1.14.10bis. or 2.1.14.10ter.; or
- 2) the commodity has been processed to ensure the destruction of the NAI virus, and the necessary precautions were taken after processing to avoid contact of the commodity with any source of NAI virus.

```
Article 2.1.14.14.
```

When importing from NAI free country or zone/compartment, Veterinary Administrations should

require:

for products of poultry origin intended for use in animal feeding, or for agricultural or industrial use

the presentation of an *international veterinary certificate* attesting that these products come from birds which have been kept in an NAI free country or zone/compartment since they were hatched or for the past 28 21 days.

When importing from a country or <u>zone/</u>compartment not considered free from NAI, *Veterinary Administrations* should require:

for meal containing meat and/or feathers and/or bones (from poultry)

the presentation of an international veterinary certificate attesting that:

- 1) the commodity has been processed to ensure the destruction of the NAI virus;
- 2) the necessary precautions were taken after processing to avoid contact of the commodity with any source of NAI virus.

```
Article 2.1.14.16.
```

When importing from a NAI free country or compartment, *Veterinary Administrations* should require:

for feathers and down (from poultry)

the presentation of an *international veterinary certificate* attesting that the entire consignment of feathers or down comes from birds which have been kept in an NAI free country or compartment since they were hatched or for the past 21 28 days.

```
Article 2.1.14.17.
```

When importing from a country or compartment not considered known to be free from NAI, *Veterinary Administrations* should require:

for feathers and down (from poultry)

the presentation of an *international veterinary certificate* attesting that:

- 1) the commodity has been processed to ensure the destruction of the NAI virus;
- 2) the necessary precautions were taken after processing to avoid contact of the commodity with any source of NAI virus.

```
Article 2.1.14.18.
```

Regardless of the NAI status of the country of origin, *Veterinary Administrations* should require for the importation of:

meat or other products from birds other than poultry

the presentation of an *international veterinary certificate* attesting that:

- 1) the commodity has been processed to ensure the destruction of the NAI virus;
- 2) the necessary precautions were taken after processing to avoid contact of the commodity

| with any source of NAI virus. |  |
|-------------------------------|--|
|                               |  |
|                               |  |
|                               |  |
|                               |  |
|                               |  |
| — text deleted                |  |